SIEMENS

MODULARIS Uro Plus

SP

Planning Guide

System

MODULARIS Uro Plus

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Document revision level

The document corresponds to the version/revision level effective at the time of system delivery.

Revisions to hardcopy documentation are not automatically distributed.

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General Notes

- With distribution of these revision level, all preceding planning guides, Speed Infos (PGs) and drafts lose their validity.

- All layouts issued by the Planning Departments must bear a note referring to the installation and delivery conditions of Siemens Medical Engineering. The installation and delivery conditions must be submitted with the layouts.

- Unless otherwise specified, all dimensions are indicated in "mm".

⧫ - The symbol indicates a change (see revision status).

- Orientation points
  Points specific to system components to which reference is made when positioning system components to each other or in the room.
  The isocenter of a radiographic system is always illustrated as the orientation point.

- Fixpoints
  Clearly marked points on system components, installation ceiling, walls or floor on which cable outlets are located.
  Illustration in the drawings: octagon with letter/number-combination.
  The cable lengths specify the maximum fixpoint distances and thus the maximum distances between the individual system components.

- Room height
  The room height is the distance measured from the top surface of the floor to the bottom surface of the ceiling structural elements (Unistrut rails) (bottom surface of drop ceiling).

- Room lighting
  According to DIN 68 68-57 (international standard in preparation), the lighting in rooms in which image playback devices (monitors) are used for diagnosis, the following requirements must be met:

  adjustable, no anti-glare screen, reproducible adjustment of the lighting (e.g. dimmer with scale),

  no glare or reflection from windows, lights and light boxes in the standard working position of the monitors.

Hotline + 49 (9191) 18 - 8080

Safety

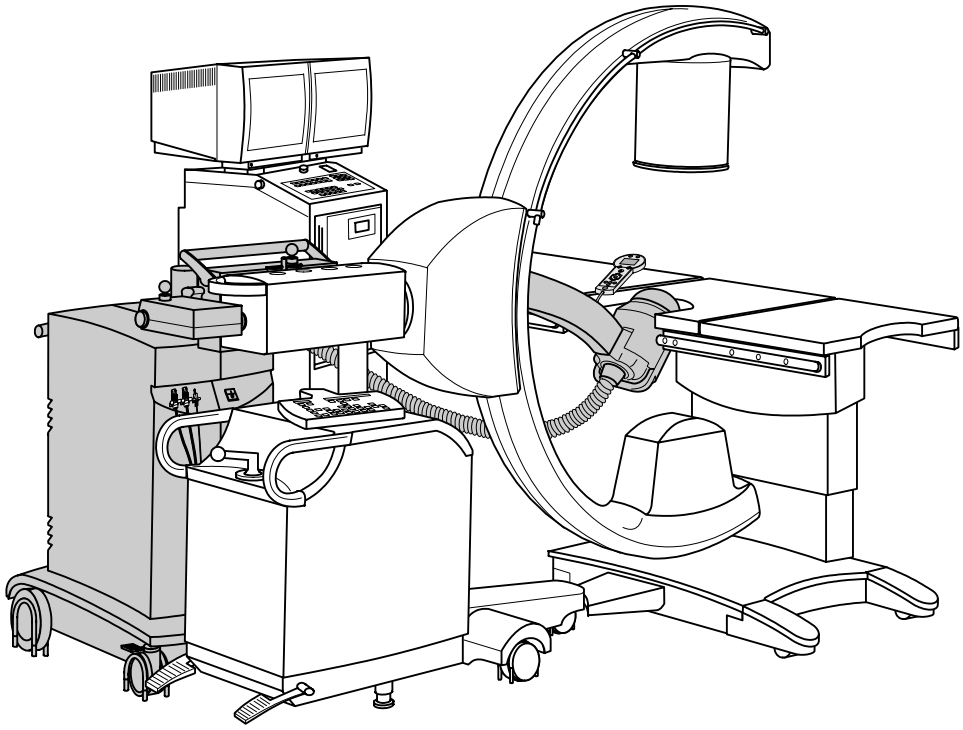
- The provisions of the relevant fire safety regulations must be observed for the premises.

- The system has been developed according to EN 60601 - 1.

- Minimum dimensions (e.g. room heights, safety distances) indicated in the planning guides are marked "min."

- Basic strength against electromagnetic sources of interference.
  Result of lightning discharges.
  The protection targets of the different lightning protection areas up to the unit connection are also specified in the IEC 1024, DIN 48810, VDE 0675 and in the DEMVT recommendations.

MODULARIS "Litho Configuration" (partial illustration)



MODULARIS "UltraLith Configuration"

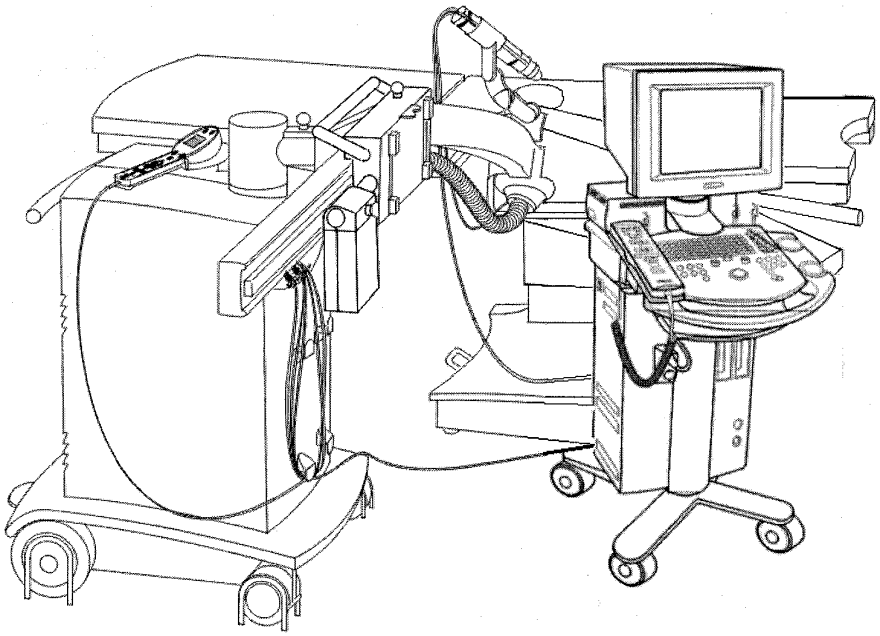
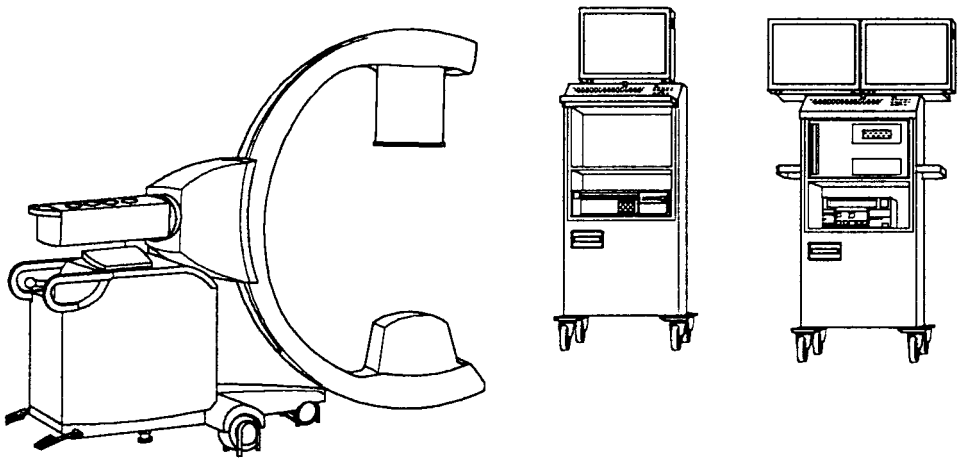


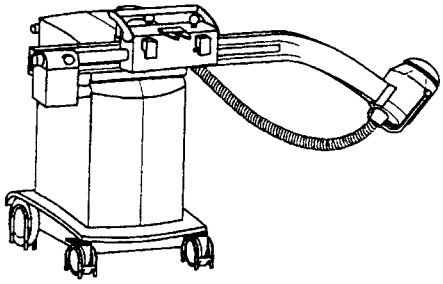
Illustration of MODULARIS Uro Plus Components

ARCADIS Orbic with monitor cart

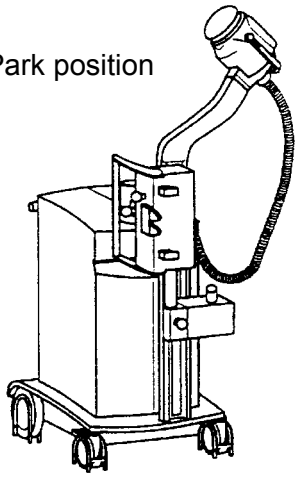


LITHOSTAR MODULARIS

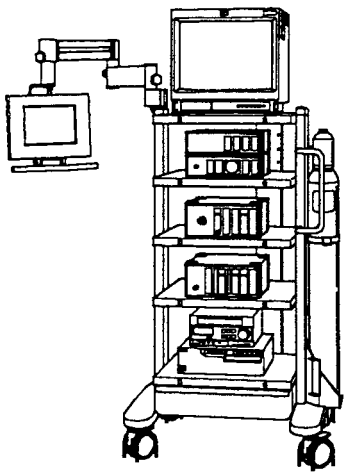
Operation position



Park position

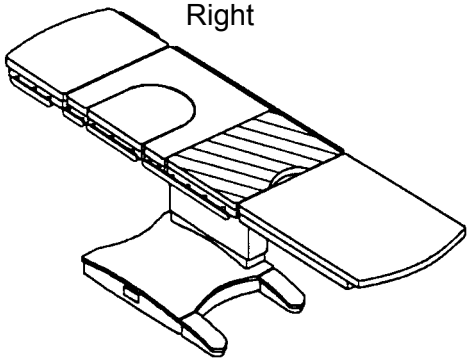


MODULARIS MUT

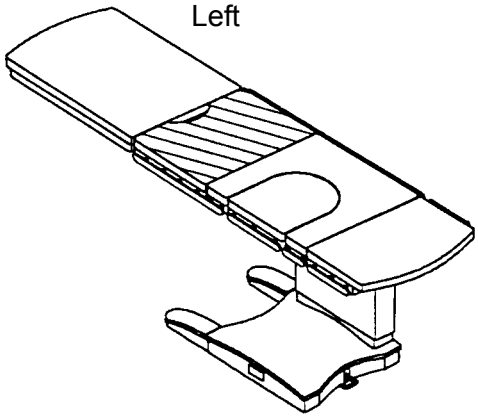


MODULARIS Uro

Right



Left



Possible Configurations:

	MODULARIS Uro Plus Configuration			
	Litho	**UltraLith**	**Endo**	**Total**
MODULARIS Uro	X	X	X	X
ARCADIS Orbic	X	Option	X	X
LITHOSTAR MODULARIS	X	X		X
SONOLINE G20	Option	X	Option	X
MUT MODULARIS			X	X
KION	Option	Option	Option	Option

Transmobile MODULARIS Uro Plus in a "Litho Configuration"

Transmobile means that the user transports the equipment in a vehicle to a hospital. In the hospital, the equipment is assembled and treatment is performed. Then the equipment is prepared by the user for transport and is transported to another hospital. The procedure is repeated there.

If the equipment of the MODULARIS Uro Plus platform needs to be transported, the User Instructions SPL1-130.622.06 ... (Preparing the Vehicle) and
SPL1-130.622.05 ... (Preparations for Transport) must be observed.

Litho Share

Litho Share means that the LITHOSTAR MODULARIS can be coupled to different ARCADIS Orbic or SIREMOBIL Iso-C units (they must be prepared for this) without having to readjust the isocenter, i.e. the user purchases several SIREMOBIL Iso-C units and only one LITHOSTAR MODULARIS. Nothing more needs to be noted for planning.

NOTE **Litho report functions only in <u>one</u> ARCADIS Orbic.**

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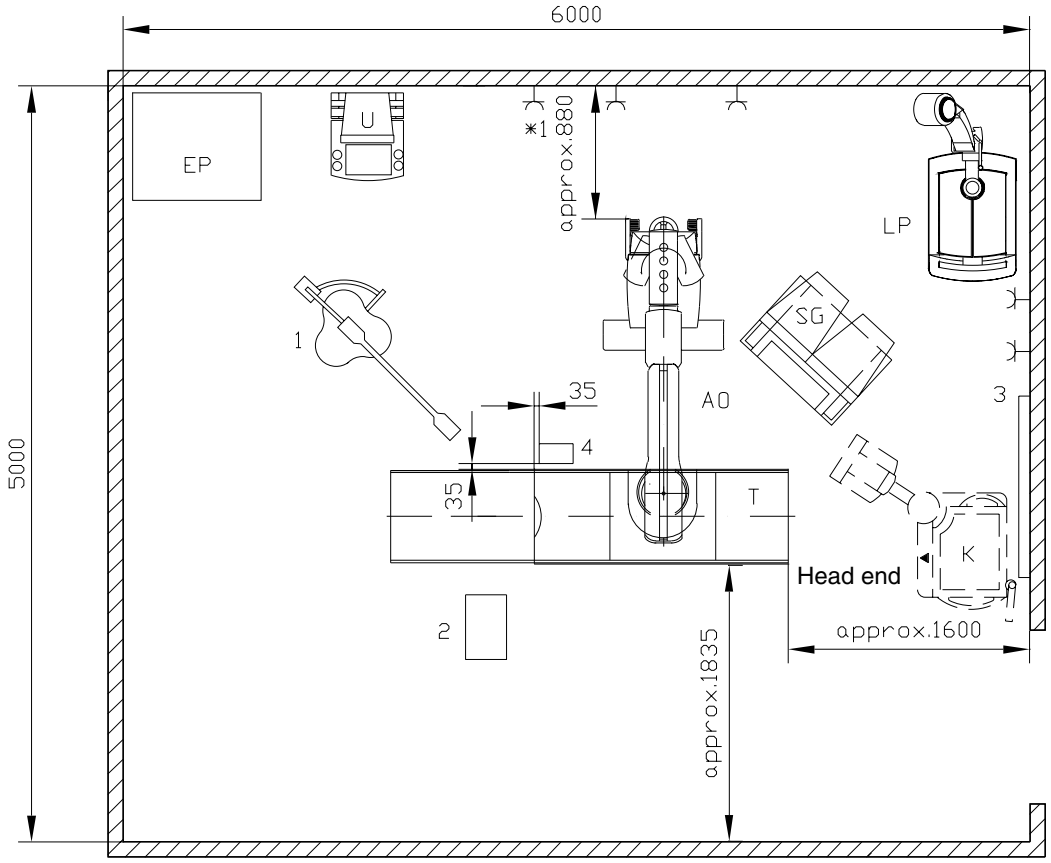
MODULARIS Uro Plus Room Planning Recommendation, "Total Config."



1 : 50

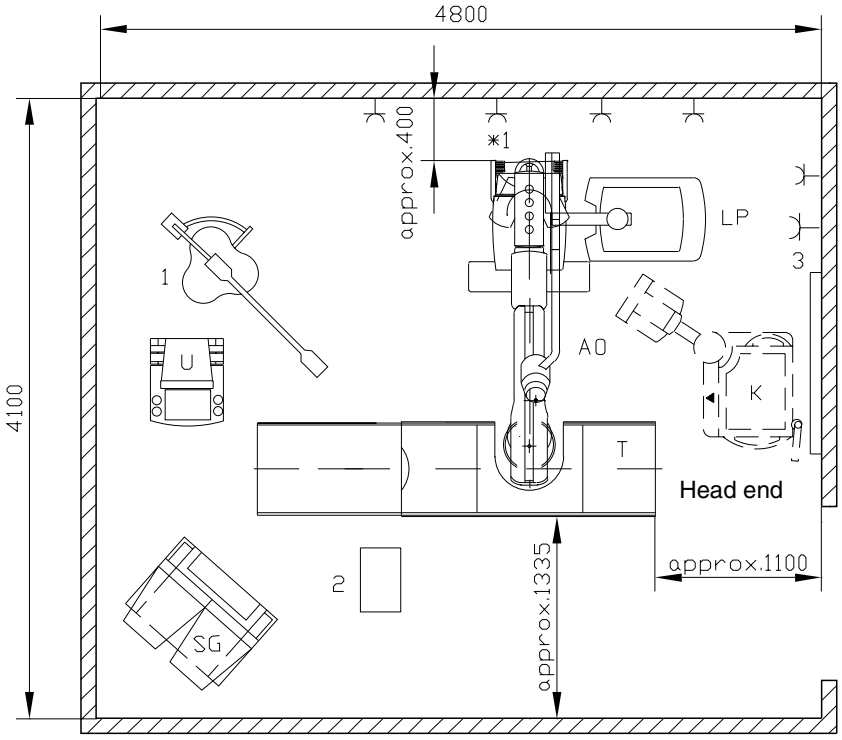
NOTE	The floor must be level in the area marked AO and T.

MODULARIS Uro Plus "Total Configuration"	AO = ARCADIS Orbic, SG = Monitor cart, T = MODULARIS Uro (patient table), LP = LITHOSTAR MODULARIS, U = SONOLINE G20 (option), Patients monitor (option), location on LITHOSTAR MODULARIS
Can be ordered from SIEMENS	K = KION anesthesia unit, 1 = OP lamp 4 = Stationary water installation (at customer's request)
Customer	Power outlets (*1 ARCADIS Orbic power outlet), 2 = Height-adjustable container for rinse solutions With anesthesia unit: 3 = Power supply rail (for gas connection, observe country-specific connectors)
from the RICHARD WOLF Co.	EP = MODULARIS MUT (MUT = MOBIL UNIT TOWER) without support arm (with support arm, see Page 2-11)

Room Size

	Area	Length	Width	Height
Technical minimum examination room size	30 m^2	6.0 m	5.0 m	min. 2.4 m

MODULARIS "Litho Configuration" Room Planning Recommendation



1 : 50

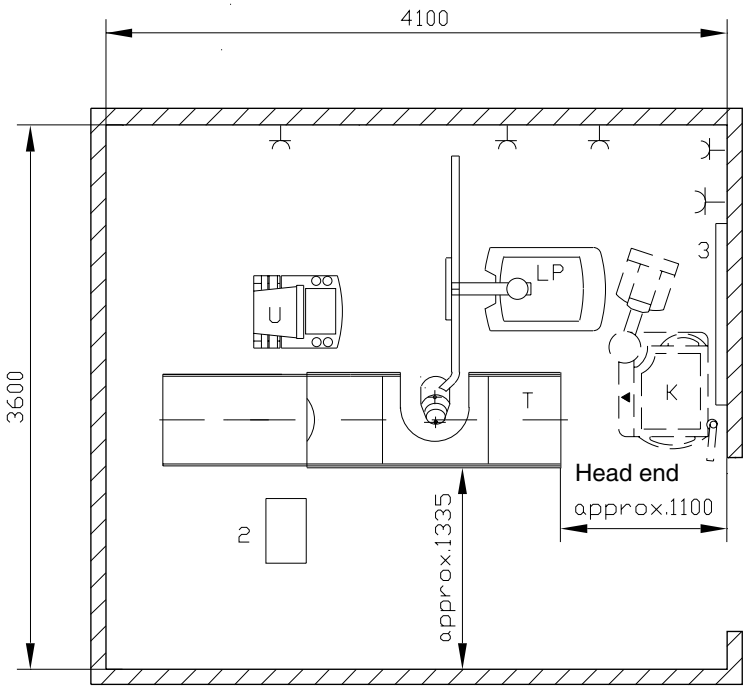
NOTE	The floor must be level in the area marked AO and T.

MODULARIS "Litho Configuration"	AO = ARCADIS Orbic, SG = Monitor carts, T = MODULARIS Uro (patient table), LP = LITHOSTAR MODULARIS, U = SONOLINE G20 (option) Patients monitor for ECG triggering (option), location on LITHOSTAR MODULARIS
Can be ordered from SIEMENS	K = KION anesthesia unit, 1 = OP lamp
Customer	Power outlets (*1 ARCADIS Orbic power outlet), 2 = Height-adjustable container rinse solutions With anesthesia unit: 3 = Power supply rail (for gas connection, observe country-specific connectors)

Room Size

	Area	Length	Width	Height
Technical minimum examination room size	20 m^2	4.8 m	4.1 m	min. 2.4 m

MODULARIS "UltraLith Configuration" Room Planning Recommendation



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NOTE	The floor must be level in the area marked T.

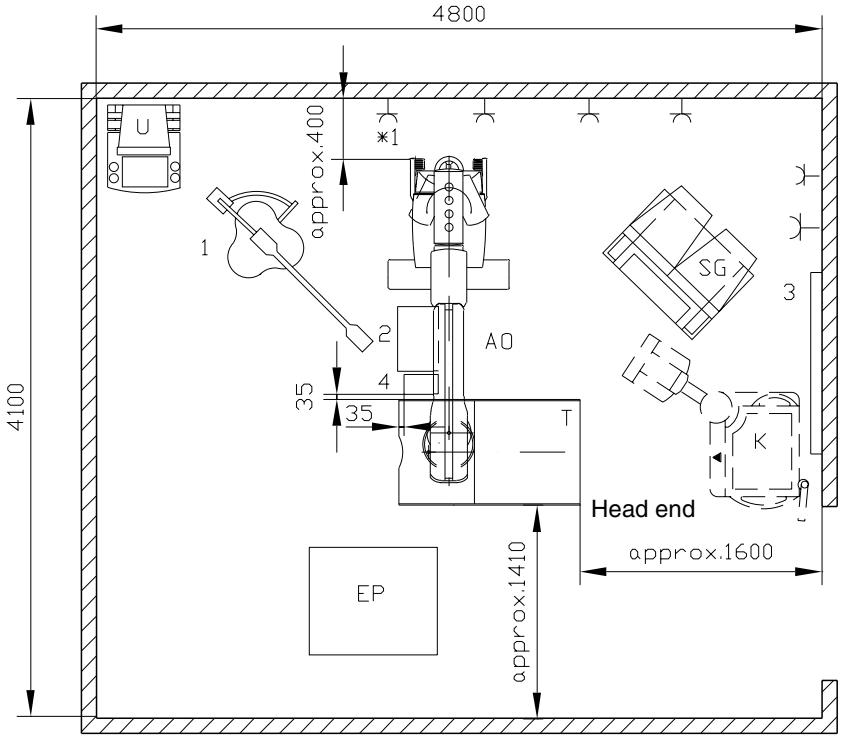
NOTE	Room planning recommendation optional with ARCADIS Orbic, see Page 2-2

MODULARIS "UltraLith Configuration"	T = MODULARIS Uro (patient table), LP = LITHOSTAR MODULARIS, U = SONOLINE G20 Patients monitor for ECG triggering (option), location on LITHOSTAR MODULARIS
Can be ordered from SIEMENS	K = KION anesthesia unit
Customer	2 = Height-adjustable container rinse solutions With anesthesia unit: 3 = Power supply rail (for gas connection, observe country-specific connectors)

Room Size

	Area	Length	Width	Height
Technical minimum examination room size	14.8 m^2	4.1 m	3.6 m	min. 2.4 m

MODULARIS "Endo Configuration" Room Planning Recommendation



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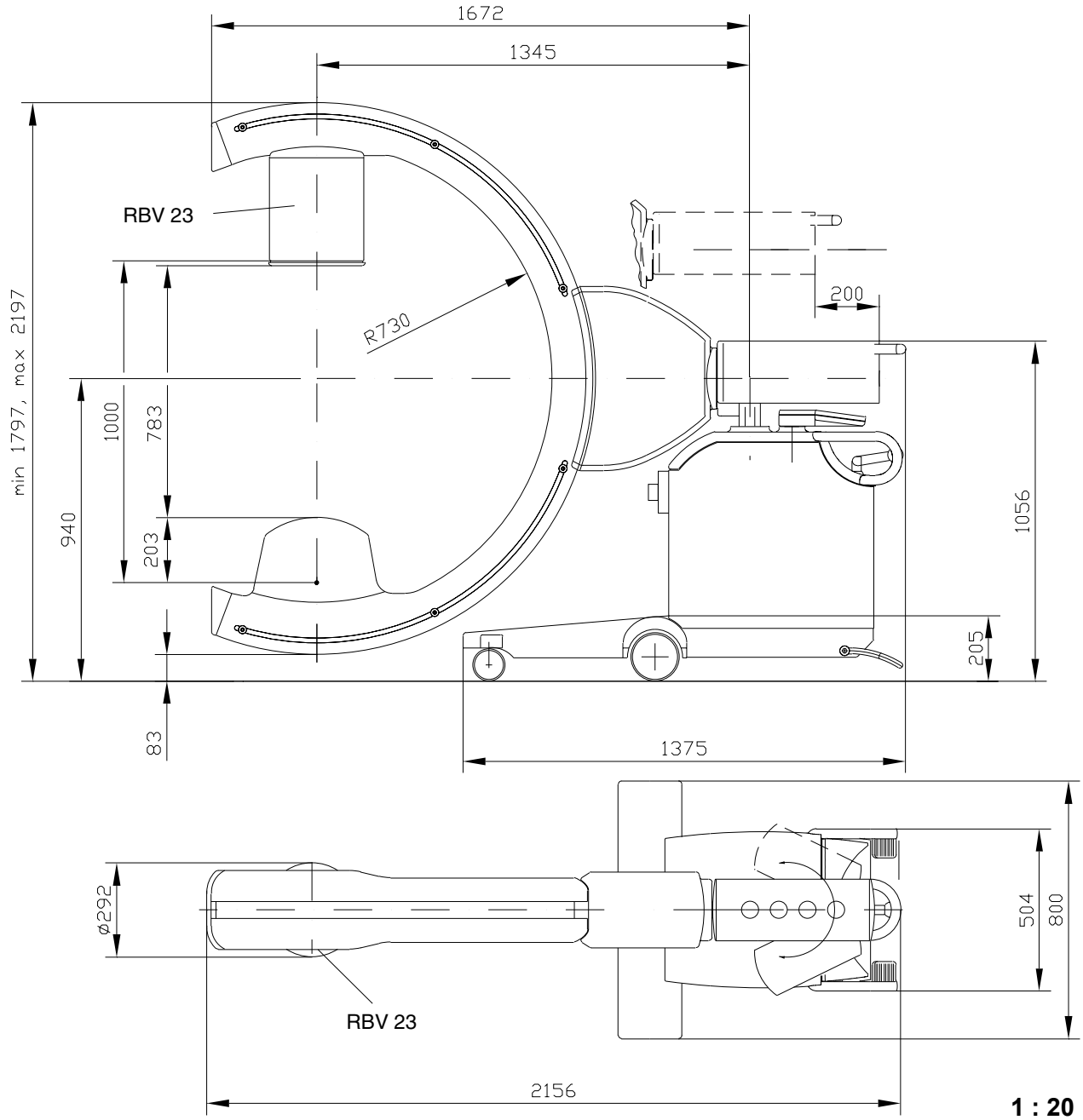
NOTE	The floor must be level in the area marked T.

MODULARIS "Endo Configuration"	AO = ARCADIS Orbic, SG = Monitor carts, T = MODULARIS Uro (patient table), U = SONOLINE G20 (option) Patients monitor (option), location on LITHOSTAR MODULARIS
Can be ordered from SIEMENS	K = KION anesthesia unit, 1 = OP lamp 4 = Stationary water installation (at customer's request)
Customer	Power outlets (*1 ARCADIS Orbic power outlet), 2 = Height-adjustable container for rinse solutions 3 = Power supply rail (for gas connection, observe country-specific connectors)
from the RICHARD WOLF Co.	EP = MODULARIS MUT (MUT = MOBIL UNIT TOWER) without support arm (with support arm, see Page 2-11)

Room Size

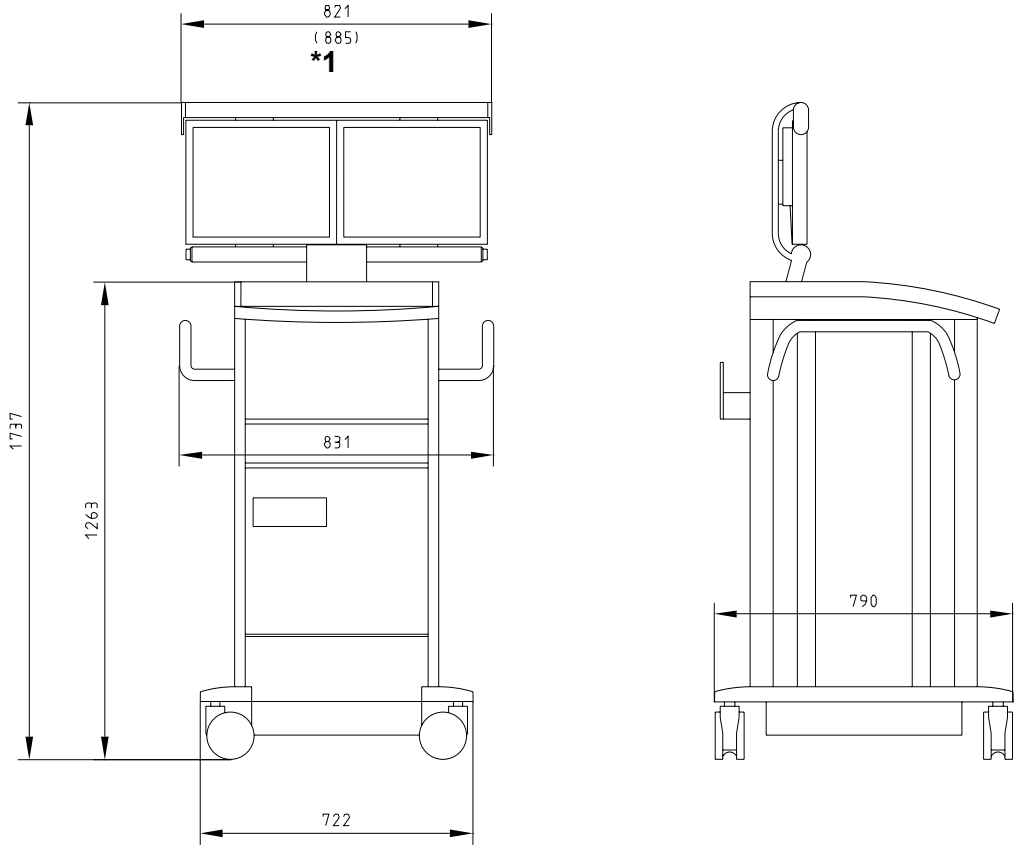
	Area	Length	Width	Height
Technical minimum examination room size	20 m^2	4.8 m	4.1 m	min. 2.4 m

ARCADIS Orbic Dimensions

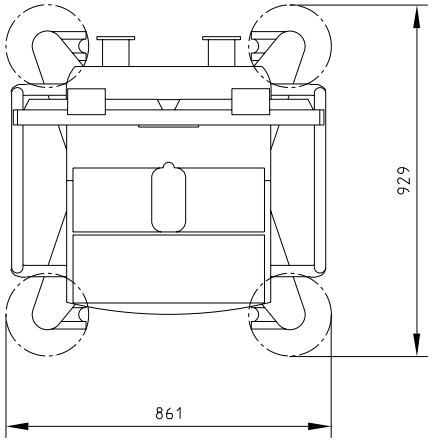


		With Lithotripsy
Horizontal lift:	200 mm	± 0 mm
Vertical lift:	400 mm	fixed at 1070 mm (*1)
Angulation:	± 190°	± 20°
Orbital rotation:	190° (± 95°)	± 0°
Horizontal pivot:	± 10°	± 0°
With the laser light localizer option, the following must be observed:	The laser light localizer has two lasers in Class 2 (IEC 825). The country-specific regulations that are applicable from this must be observed.	

Monitor Cart Dimensions

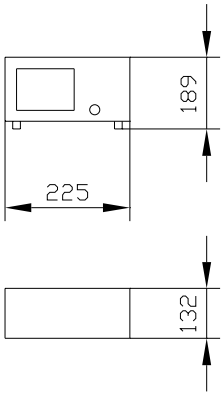


*1 Option: black/white display

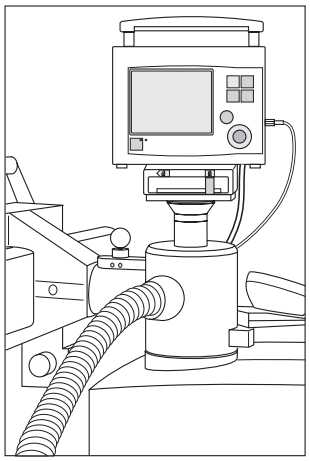


SONOLINE G20 with Monitor

Patients monitor Dimensions

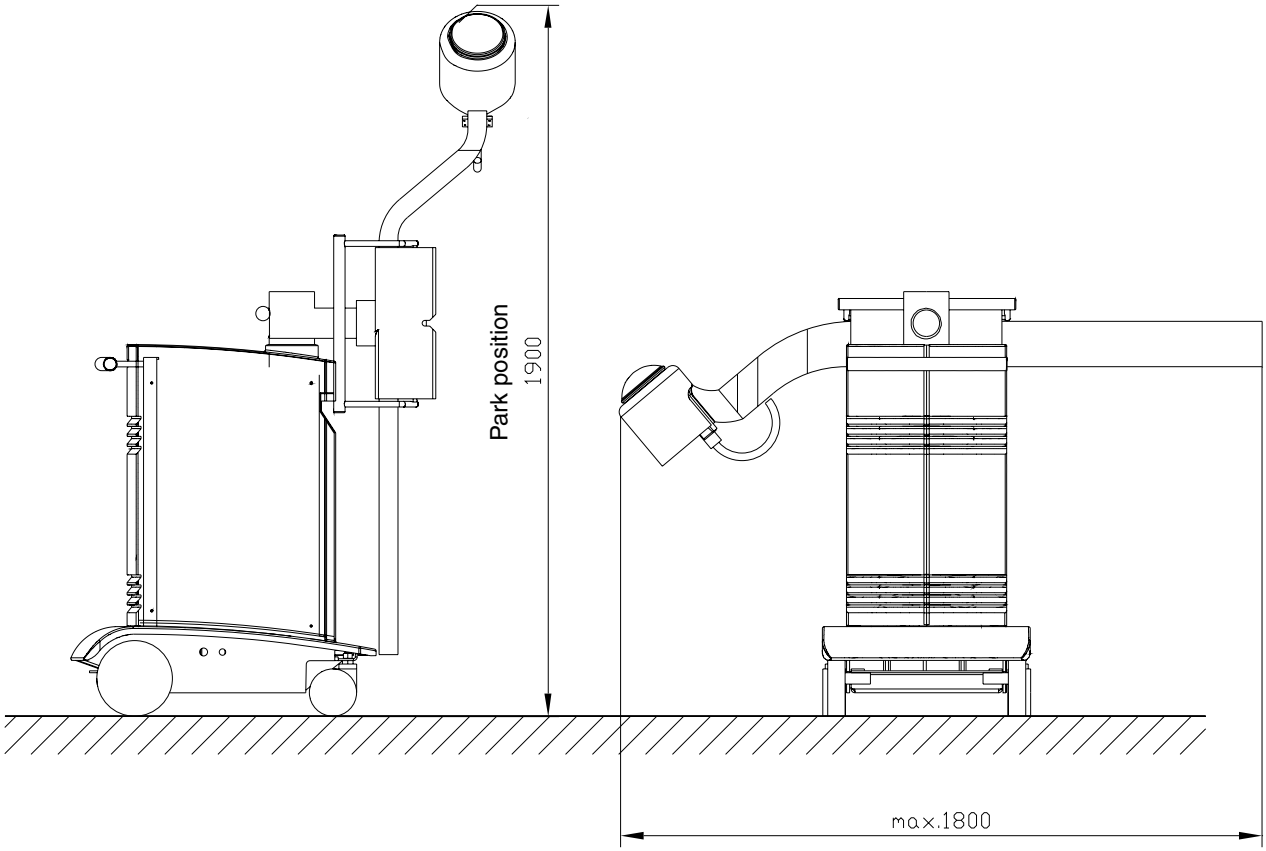


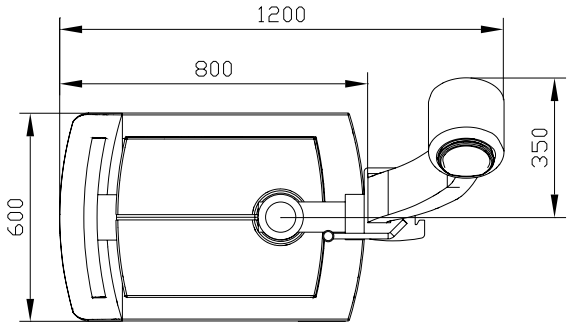
Patients monitor on the LITHOSTAR MODULARIS



The patient monitor is placed on the LITHOSTAR MODULARIS (mount, Part No. 55 31 343), see the patient monitor drawing on the LITHOSTAR MODULARIS.
The required cables from the LITHOSTAR MODULARIS to the patient monitor are included in the items shipped with the LITHOSTAR MODULARIS.

LITHOSTAR MODULARIS Dimensions

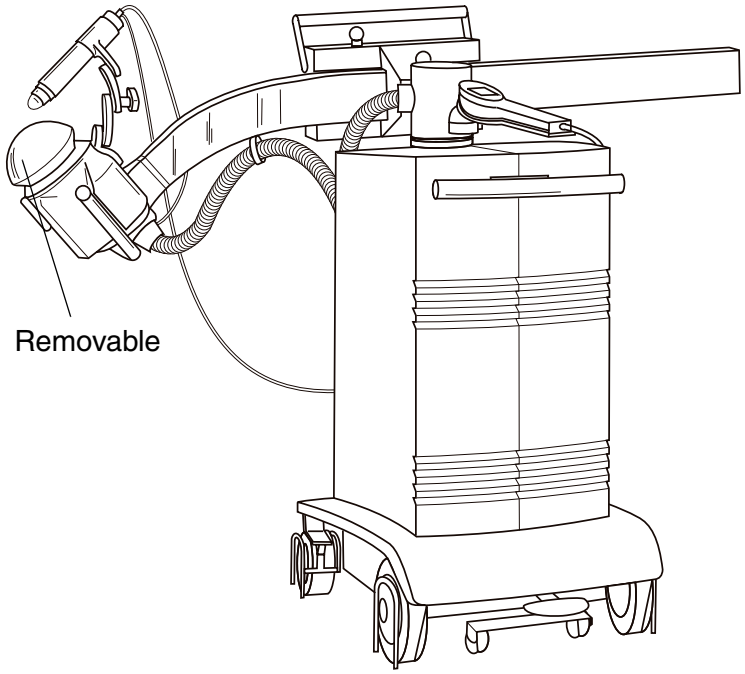




NOTE	The illustrations on this page are not to scale!

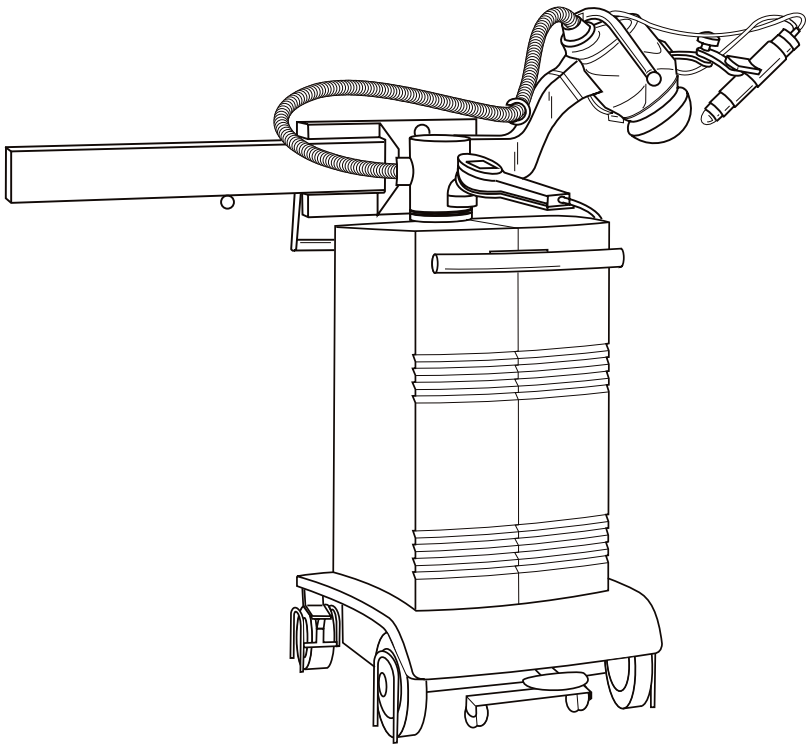
LITHOSTAR MODULARIS

with Ultrasound Localization

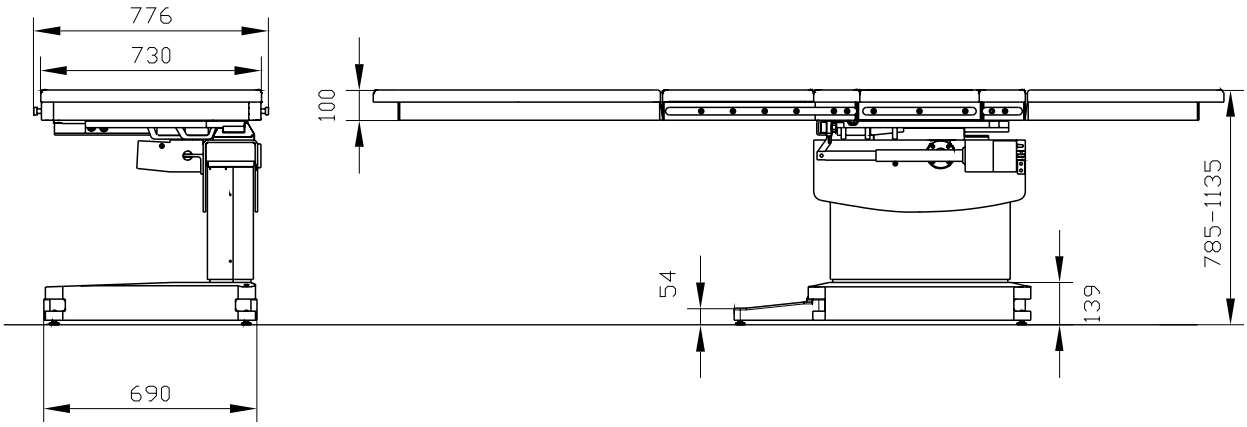


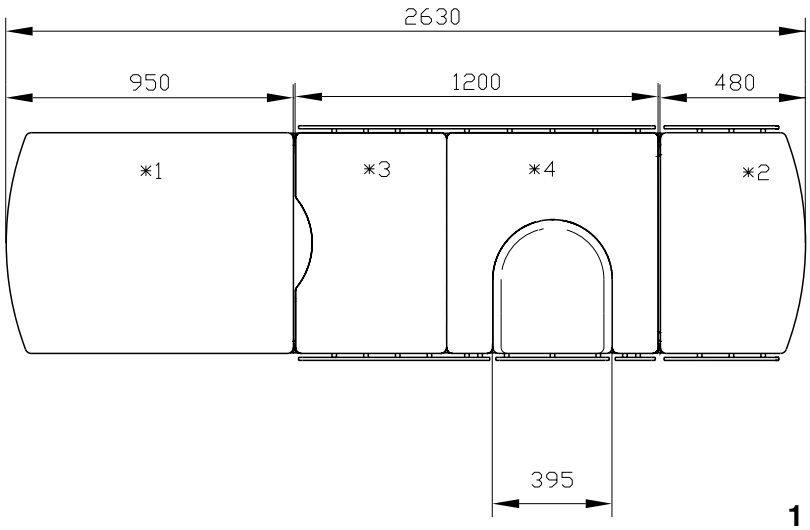
Support arm pivoted

The mount for Ultrasound Localization is transferred to the shock head.



MODULARIS Uro Dimensions





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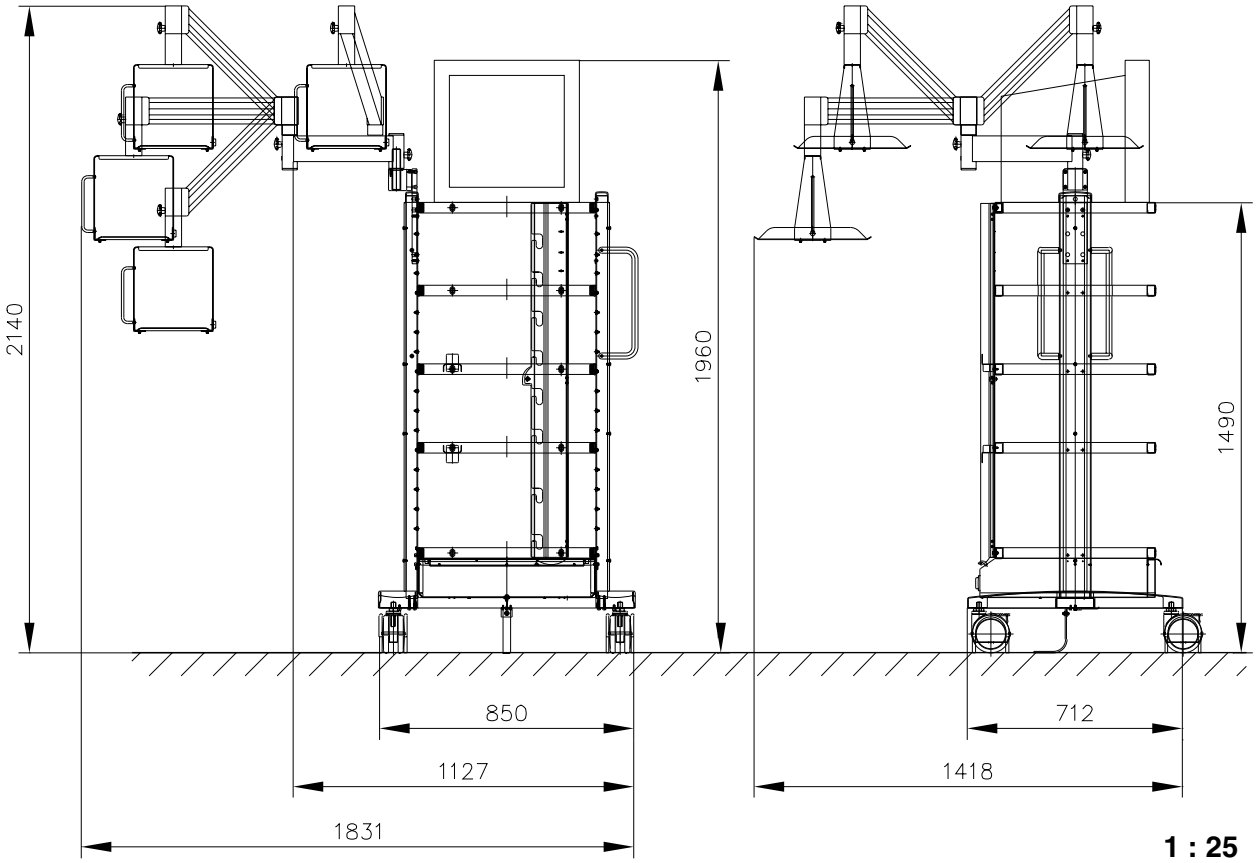
*1	Table extension, foot section	Depending on application, can be inserted on the left or right
*2	Table extension, head section	Depending on application, can be inserted on the left or right
*3	Radio-transparent tabletop	It can also be installed to the right of the middle section *4 (Update Kit 56 66 651 J 1048). This section should not be pointing in the direction of the entrance door (optical safety).
*4	Middle section	

MODULARIS MUT



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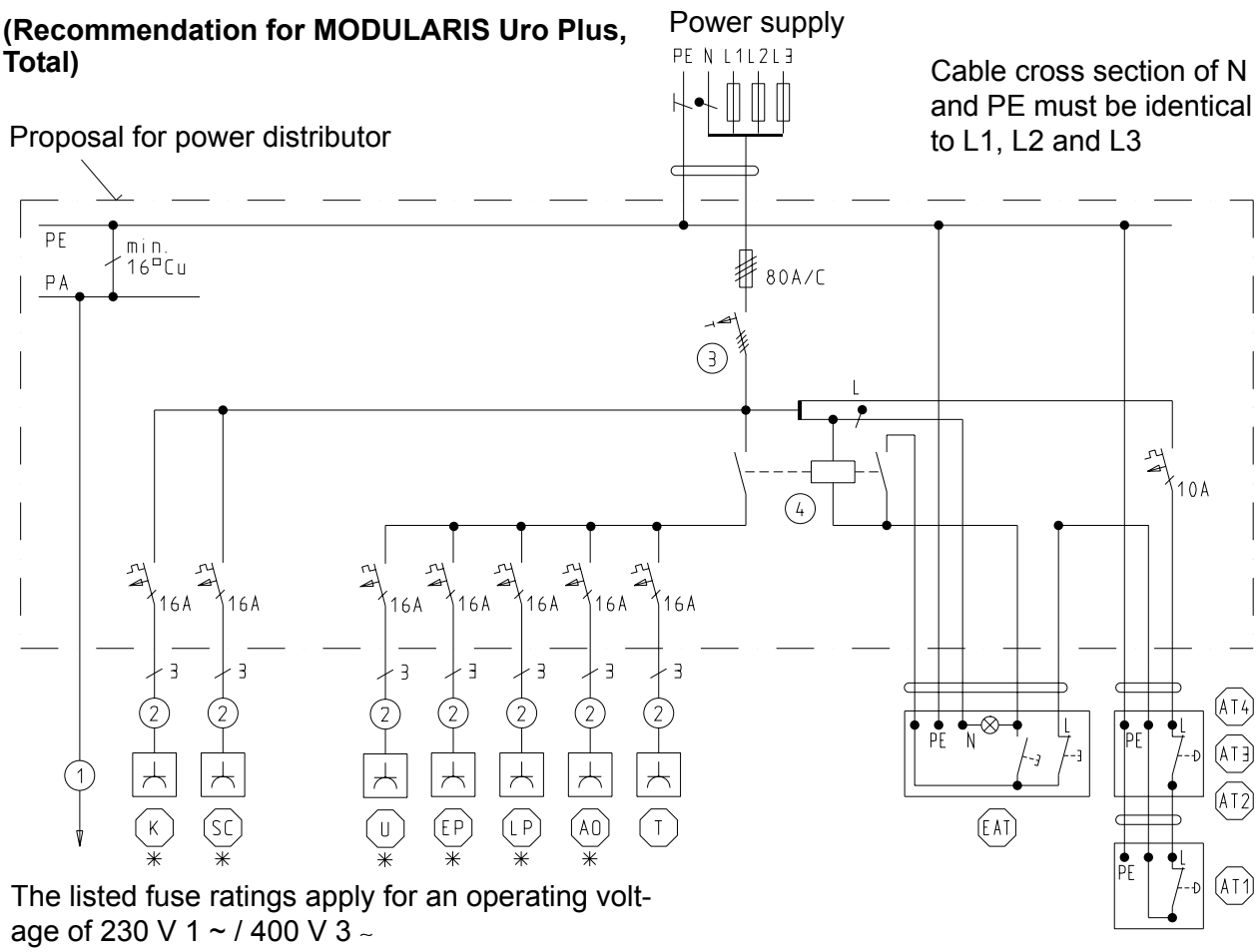
Recommendation for On-site Electro Installation (Application Group 1)

Power distributor per DIN VDE 0100-710: 1994-10 Application Group 1 or national regulations

(Recommendation for MODULARIS Uro Plus, Total)



The listed fuse ratings apply for an operating voltage of 230 V 1 ~ / 400 V 3 ~
If there are fluctuating operating voltages, the fuse ratings must be changed to conform to national regulations.

(1) To external, conductive parts

(2) Power consumers, fixed and mobile e.g. power outlet

(3) FI - switch 63 A/I $_{\Delta N}$ 30 mA, U_N = 400/415 V ~ for alternating and pulsing direct current faults (recommended: Siemens FI 5SZ3 466 0KG05 All-current sensitive or ABB No. F 804 - 63 /0,03. Order from ABB Stotz; contact Heidelberg Tel. 06221 701-00).
For other power line voltages, an appropriate Fi - switch must be obtained locally.

(4) System breaker

* Install depending on system configuration

(AT) Emergency off button with locking mechanism

(EAT) On-off button with pilot lamp

(EP) MODULARIS MUT

(K) KION anesthesia unit

(LP) LITHOSTAR MODULARIS

(SC) Patients monitor

(AO) ◆ ARCADIS Orbic (CEE-power outlet 16 A)

(T) MODULARIS Uro

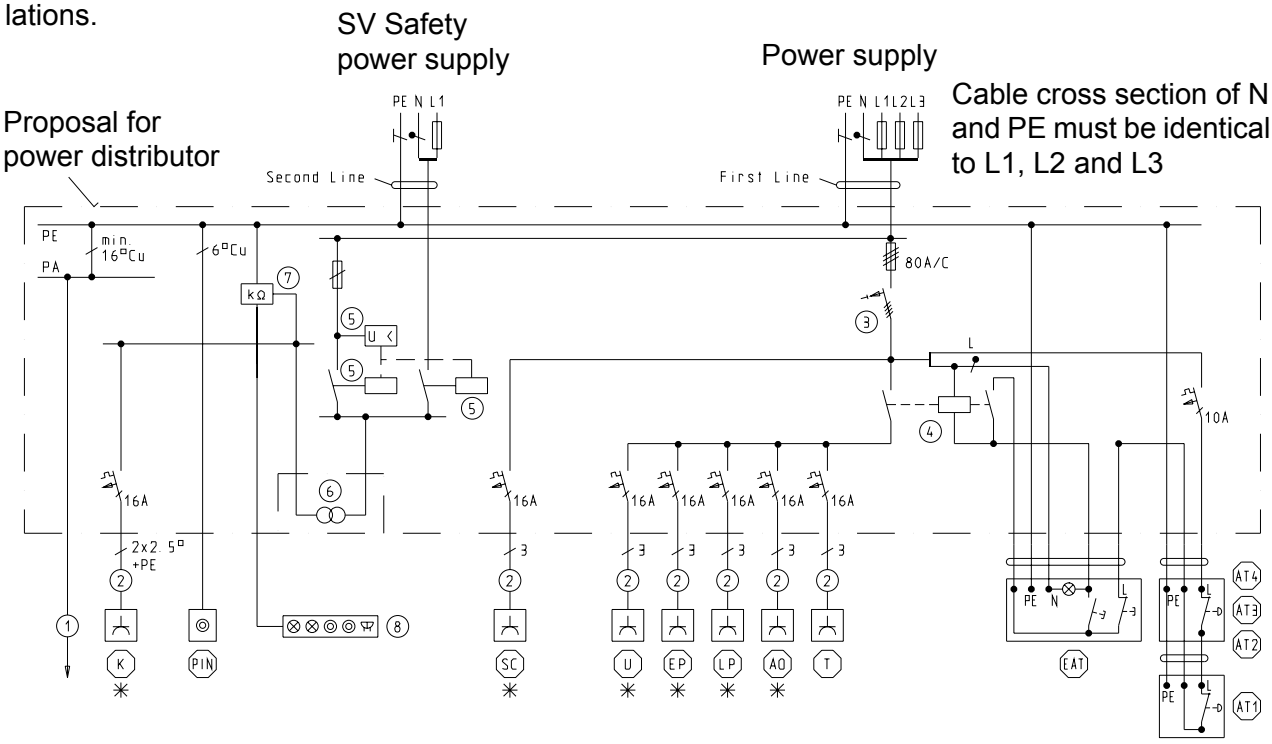
(U) SONOLINE G20

Recommendation for On-site Electro Installation (Application group 2)

Power distributor per DIN VDE 0100-710: 1994-10 Application Group 2 or national regulations

(Recommendation for r MODULARIS Uro Plus, Total)

The listed fuse ratings apply for an operating voltage of 230 V 1 ~ / 400 V 3 ~
With fluctuating operating voltages, the fuse ratings must be changed to conform to national regulations.



1. To external, conductive parts
2. Power consumers, fixed and mobile e.g. power outlet
3. FI - switch 63 A/I $_{\Delta N}$ 30 mA, U_N = 400/415 V ~ for alternating and pulsing direct current faults (recommendation: Siemens FI 5SZ3 466 0KG05 All-current sensitive or ABB No. F 804 - 63 /0,03. Order from ABB Stotz; contact Heidelberg Tel. 06221 701-00).
   For other power line voltages, an appropriate Fi - switch must be obtained locally.
4. System breaker
5. Voltage monitoring and toggling device per DIN VDE 0107
6. Isolation transformer with overload monitor
7. Isolation monitor
8. Message combination

AT Emergency off button with locking mechanism
EAT On-off button with pilot lamp
EP MODULARIS MUT
K KION anesthesia unit
LP LITHOSTAR MODULARIS
PIN PE - Pin socket
SC Patients monitor
AQ ♦ ARCADIS Orbic (CEE-power outlet 16 A)
T MODULARIS Uro
U SONOLINE G20

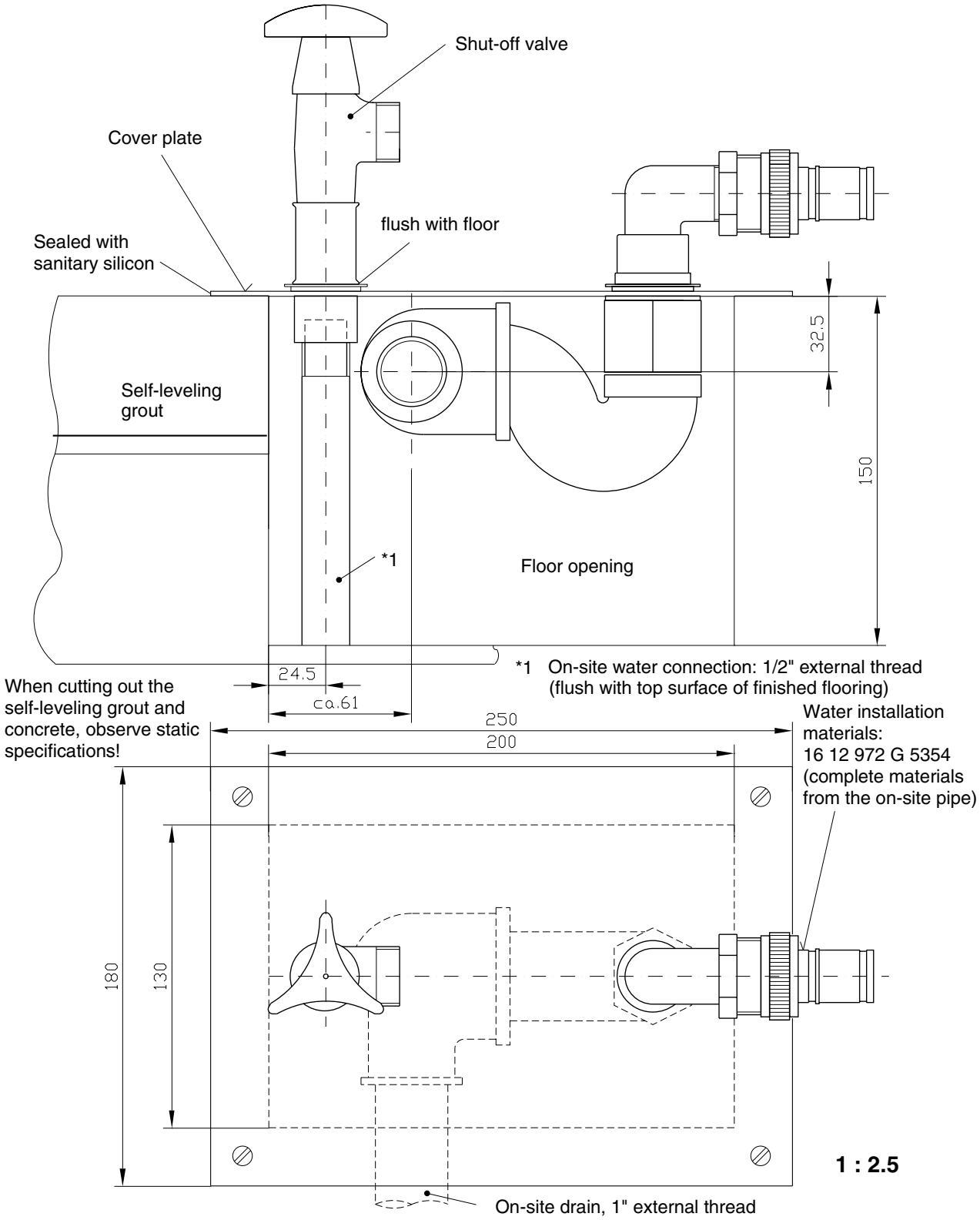
* Install depending on system configuration

Floor Properties

All modules with the exception of the patients monitor are mobile.

NOTE	**The floor should be laid with a floor covering that has a hard surface which allows the unit to be moved easily.**

Stationary Water Installation (Recommendation)



NOTE

Intrusion of foreign substances into the tap water supply must be prevented. Please observe the legal regulations applicable in the countries, as well as the local regulations.

Cable Connections

Module	Power cable length	Connector
• LITHOSTAR MODULARIS	approx. 6 m	115/230 V: connector type matched to CEE 7/VII grounded connector
• MODULARIS Uro (patient table)	approx. 6 m	115/230 V: connector type matched to CEE 7/VII grounded connector
• SONOLINE G20	approx. 3.5 m	115 V: Type SJT with hospital-approved 3-pin male connector 230 V: type match to CEE 7/VII grounded connector
• Monitor carts (ARCADIS Orbic)	approx. 6 m	115 V: hospital-approved, 15 A 230 V: CEE ME 320 P6 (16 A)
z. Monitor carts - ARCADIS Orbic	approx. 6 m	No power connector
• KION anesthesia unit	approx. 6 m	115 V: Type SJT with hospital-approved 3-pin male connector 230 V: type with CEE 7/VII grounded connector
• Patients monitor ECG unit	approx. 3 m	115 V: Type SJT with hospital-approved 3-pin male connector 230 V: type matched to CEE 7/VII grounded connector
• MODULARIS MUT	approx. 5 m	115 V: Type SJT with hospital-approved 3-pin male connector 230 V: type matched to CEE 7/VII grounded connector

NOTE

Because there are many different country-specific power connectors, it is possible that the individual modules will have to be replaced.

Power connectors must be obtained locally.

For USA and Canada, the hospital-grade connector must be used.

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Electrical Data

	Power line connection	internal fusing	Power line internal resistance	Power consumption
⧫ *** ARCADIS Orbic**	100/110/120/127/200/ 230/240 V ± 10% 50/60 ± 1 Hz	15 A slow-blow above 200 V 20 A slow-blow up to 127 V	≤ 0.3 Ohm (100/120/127 V) ≤ 0.8 Ohm (200/230/240 V)	Short-term: approx. 2.90 KVA Long-term: approx. 1.65 KVA
MODULARIS Uro (patient table)	100 - 230 V ± 10% 50/60 ± 1 Hz	10 A	n.a.	approx. 0.4 KVA
LITHOSTAR MODULARIS	100/120/200/230 V ± 10% 50/60 ± 1 Hz	16 A	n.a.	approx. 1.5 KVA
SONOLINE G20	115/230 V ± 10% 50/60 ± 1 Hz	3 A	n.a.	approx. 0.350 KVA
KION anesthesia unit	100 - 240 V ± 10% 50/60 ± 1 Hz	6.3 A	n.a.	approx. 0.5 KVA
MODULARIS MUT (RICHARD WOLF Co.)	100 - 127/230 V ± 10% 50/60 ± 1 Hz	9 A slow-blow up to 127 V 16 A slow-blow above 200 V	n.a.	approx. 2.0 KVA

Weights and Heat Dissipation

	Weight (kg)	Heat dissipation (W)
⧫ *** ARCADIS Orbic with 23 I.I.**	approx 350	approx. 500
⧫ **Monitor cart**	approx. 180	approx. 150
MODULARIS Uro (patient table)	approx. 280	approx. 100
LITHOSTAR MODULARIS	approx. 200	approx. 700
SONOLINE G20	approx. 60	approx. 450
KION anesthesia unit	approx. 180	approx. 400
MODULARIS MUT (RICHARD WOLF Co.)	approx. 210 with max. config.	approx. 500 with max. config. 1000

⧫ * Observe the PG: ARCADIS Orbic, SPR2-320.891.01...

Environmental Conditions

		Operation	Transport/Storage
ARCADIS Orbic Monitor cart	**Admissible ambient temperature**	+ 10° C ... + 37° C	- 20° C ... + 37° C
	Admissible rel. humidity	30%... 75%	30% ... 75%
	Atmospheric pressure	700 hPa - 1060 hPa	700 hPa - 1060 hPa
LITHOSTAR MODULARIS	**Admissible ambient temperature**	+ 10° C ... + 40° C	- 20° C ... + 60° C
	Admissible rel. humidity	30% ... 75%	30% ... 75%
	Atmospheric pressure	700 hPa - 1060 hPa	700 hPa - 1060 hPa
MODULARIS Uro	**Admissible ambient temperature**	+ 10° C ... + 40° C	- 40° C ... + 70° C
	Admissible rel. humidity	30% ... 75%	10% ... 100%
	Atmospheric pressure	700 hPa - 1060 hPa	500 hPa - 1060 hPa
SONOLINE G20	**Admissible ambient temperature**	+ 10° C ... + 40° C	- 20° C ... + 60° C
	Admissible rel. humidity	20% ... 85%	20% ... 85%
	Atmospheric pressure	700 hPa - 1060 hPa	700 hPa - 1060 hPa
KION anesthesia unit	**Admissible ambient temperature**	+ 15° C ... + 35° C	- 10° C ... + 60° C
	Admissible rel. humidity	30% ... 75%	30% ... 75%
	Atmospheric pressure	700 hPa - 1060 hPa	700 hPa - 1060 hPa
MODULARIS MUT (RICHARD WOLF Co.)	**Admissible ambient temperature**	+ 10° C ... + 40° C	- 20° C ... + 60° C
	Admissible rel. humidity	30% ... 75%	10% ... 90%
	Atmospheric pressure	700 hPa - 1060 hPa	500 hPa - 1060 hPa

Paint Colors

Primary color	Medical White C610
Base	Medium Basic A701
Grips	Medical Blue C750

Additional Data

ARCADIS Orbic	see PG SPR2-320.891.01...

Noise Development

Test equipment

Larson Davis:

Realtime Time Analyser	2900
Precision Microphone	2541
Mircrophne Preamplifier	900B
Precision Sound Calibrator	CA 250

For the user

—	**Noise generation** [**db** (**A**)] **1.5 meters from the noise source at 2 Hz final frequency**	
		Behind the radiation safety wall
Energy level 4	74	68
Energy level 8	90	72

	With 8 patients **(3000 shock waves / patient results in a load of)**
Energy level 4	76 [db (A)]
Energy level 8	85 [db (A)]

For the patient

—	**Noise generation** [**db** (**A**)] **1.5 meters from the noise source at 2 Hz final frequency**
Energy level 4	77
Energy level 8	82

Packaging

*** ARCADIS Orbic**	**Packaging size**	L x W x H / mm: 2450 x 990 x 2100
	Weight with 23 RBV	approx. 650 kg with packaging (overseas packing)
*** Monitor cart**	**Packaging size**	L x W x H / mm: 980 x 910 x 1910
	Weight	approx. 195 kg without packaging
LITHOSTAR MODULARIS	**Packaging size**	L x W x H / mm: 1400 x 800 x 2200
	Weight	approx. 220 kg with packaging
MODULARIS Uro (patient table)	**Packaging size**	L x W x H / mm: 1480 x 940 x 1340
	Weight	approx. 300 kg with packaging
SONOLINE G20	**Packaging size**	L x W x H / mm: 960 x 600 x 1450
	Weight	approx. 83 kg with packaging
KION anesthesia unit	**Packaging size**	L x W x H / mm: 750 x 590 x 1500
	Weight	approx. 210 kg with packaging
MODULARIS MUT (RICHARD WOLF Co.)	**Packaging size**	L x W x H / mm: 900 x 750 x 1600
	Weight	approx. 230 kg without packaging

Gas Supply for KION Anesthesia Unit

Gas supply source	O_2, air, N_2O
Gas pressure	min. 2.8 / max. 6 bar (O_2, air, N_2O)

NOTE	**Observe country-specific connectors for the gas connection.**

* Observe the PG: ARCADIS Orbic, SPR2-320.891.01...

Transport Pathways

without packaging	min. 850 mm door opening approx. 1800 mm hallway width min.1900 mm door height

Elevator Requirements

without packaging	min. 850 mm door opening min. 1900 mm door height min. 2160 mm elevator compartment length
Lift capacity	min. 375 kg

NOTE

LITHOSTAR MODULARIS:

Transport and storage with no water filled in.

Transport of LITHOSTAR MODULARIS without Ultrasound mount.

Transmobile Insert

NOTE

LITHOSTAR MODULARIS

Transport Temperature + 10° C.....+ 37° C

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Chapter	Page	Change
0 - 7		Rev. status of the entire document raised from 01 to 02.
1	1-4	SIREMOBIL Iso C replaced by ARCADIS Orbic.
1	1-5	SIREMOBIL Iso C replaced by ARCADIS Orbic, text updated and Note text added.
2	2-1 to 2-4	SIREMOBIL Iso C replaced by ARCADIS Orbic.
2	2-5	New illustration inserted.
2	2-6	Dimensions of the monitor cart, new illustration inserted.
3	3-1 and 3-2	SIREMOBIL Iso C replaced by ARCADIS Orbic.
4	4-1	SIREMOBIL Iso C replaced by ARCADIS Orbic.
5	5-1 to 5-4	Technical data updated.
7	7-1	Changes to Previous Version updated.

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